

## Refine Search

### Search Results -

Terms	Documents
L1 same (control\$4 near5 data near5 operation\$2)	13

Database:

US Pre-Grant Publication Full-Text Database  
 US Patents Full-Text Database  
 US OCR Full-Text Database  
 EPO Abstracts Database  
 JPO Abstracts Database  
 Derwent World Patents Index  
 IBM Technical Disclosure Bulletins

Search:

L3

Refine Search

Recall Text

Clear

Interrupt

### Search History

 DATE: Wednesday, April 07, 2004    [Printable Copy](#)    [Create Case](#)

<u>Set</u> <u>Name</u> side by side	<u>Query</u>	<u>Hit</u> <u>Count</u>	<u>Set</u> <u>Name</u> result set
<i>DB=USPT; PLUR=YES; OP=OR</i>			
<u>L3</u>	L1 same (control\$4 near5 data near5 operation\$2)	13	<u>L3</u>
<u>L2</u>	L1 same (control\$4 near3 data)	128	<u>L2</u>
<u>L1</u>	((electronic adj1 mail) or "e-mail") same (transmit\$4 or send\$3) same receiv\$3	3498	<u>L1</u>

END OF SEARCH HISTORY

First Hit   Fwd Refs

Generate Collection

Print

L3: Entry 1 of 13

File: USPT

Feb 3, 2004

US-PAT-NO: 6687742

DOCUMENT-IDENTIFIER: US 6687742 B1

TITLE: Communication control method for electronic mail system

DATE-ISSUED: February 3, 2004

## INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
Iwazaki; Ryuji	Shizuoka-ken			JP

## ASSIGNEE-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY	TYPE CODE
Toshiba Tec Kabushiki Kaisha	Tokyo			JP	03

APPL-NO: 09/ 584442   [PALM]

DATE FILED: May 31, 2000

## FOREIGN-APPL-PRIORITY-DATA:

COUNTRY	APPL-NO	APPL-DATE
JP	11-156481	June 3, 1999
JP	11-213897	July 28, 1999

INT-CL: [07] G06 F 15/16

US-CL-ISSUED: 709/206; 358/402

US-CL-CURRENT: 709/206; 358/402

FIELD-OF-SEARCH: 709/206, 709/207, 379/100.01, 379/100.02, 379/100.08, 379/100.12, 379/100.13, 379/100.17, 358/402, 358/403, 358/434, 358/442, 358/468

PRIOR-ART-DISCLOSED:

## U.S. PATENT DOCUMENTS

Search Selected

Search ALL

Clear

PAT-NO	ISSUE-DATE	PATENTEE-NAME	US-CL
<input type="checkbox"/> <u>5666489</u>	September 1997	Fite et al.	709/220
<input type="checkbox"/> <u>6266160</u>	July 2001	Saito et al.	358/407
<input type="checkbox"/> <u>6335966</u>	January 2002	Toyoda	379/100.06
<input type="checkbox"/> <u>6457044</u>	September 2002	IwaZaki	709/206

## FOREIGN PATENT DOCUMENTS

FOREIGN-PAT-NO	PUBN-DATE	COUNTRY	US-CL
11-65963	March 1999	JP	

ART-UNIT: 2142

PRIMARY-EXAMINER: Geckil; Mehmet B.

ATTY-AGENT-FIRM: Frishauf, Holtz, Goodman &amp; Chick, P. C.

## ABSTRACT:

A sender transforms scanned image data to binary compressed data with a fixed parameter, converts it to e-mail data, adds information indicating its local control system and identification information for a capability request to the e-mail data and sends the resultant e-mail data. When a transmission destination is an electronic mail device, the transmission destination prints the attached page of specific conditions after which communications between the sender and the receiver are terminated. When the transmission destination has the same control device as the sender, the transmission destination transmits a response message to the sender in which information indicating its local control method and a capability response are provided. The sender generates, from image data, binary compressed data whose image size, resolution and coding system are matched with the capability of the transmission destination, converts this binary compressed data to e-mail data and resends the e-mail data.

18 Claims, 11 Drawing figures

First Hit    Fwd Refs



Generate Collection

Print

L3: Entry 5 of 13

File: USPT

Aug 20, 2002

DOCUMENT-IDENTIFIER: US 6437873 B1

**\*\* See image for Certificate of Correction \*\***

TITLE: Internet facsimile apparatus, network system having the same, and method of controlling the same

Detailed Description Text (4):

In FIG. 1, reference numeral 1 denotes an apparatus on the transmitting side for transmitting an image; 2, an apparatus on the receiving side for receiving an image, which has the same arrangement as the transmitting apparatus; 3, a telephone network for communicating G3 FAX; 4, the Internet for carrying e-mail; 5, a CPU for controlling the apparatus; 6, a scanner for reading an original; 7, a printer for printing out an image; 8, a FAX modem for communicating in the G3 FAX mode; 9, an NCU for connected to the telephone line; 10, an Ethernet interface for connected to the Internet; 11, a ROM storing control software; 12, a RAM for storing work of the control software and destination data; 13, an operation unit including one-touch buttons for inputting transmission destinations; and 14, an external storage such as a floppy disk or CD-ROM.

First Hit    Fwd Refs



Generate Collection

Print

L3: Entry 5 of 13

File: USPT

Aug 20, 2002

US-PAT-NO: 6437873

DOCUMENT-IDENTIFIER: US 6437873 B1

**\*\* See image for Certificate of Correction \*\***

TITLE: Internet facsimile apparatus, network system having the same, and method of controlling the same

DATE-ISSUED: August 20, 2002

## INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
Maeda; Toru	Mitaka			JP

## ASSIGNEE-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY	TYPE CODE
Canon Kabushiki Kaisha	Tokyo			JP	03

APPL-NO: 09/ 263860    [PALM]

DATE FILED: March 8, 1999

## FOREIGN-APPL-PRIORITY-DATA:

COUNTRY	APPL-NO	APPL-DATE
JP	10-057253	March 9, 1998

INT-CL: [07] H04 N 1/00, H04 N 1/32, G06 F 15/00

US-CL-ISSUED: 358/1.15; 358/402, 358/442

US-CL-CURRENT: 358/1.15; 358/402, 358/442

FIELD-OF-SEARCH: 358/1.15, 358/442, 358/405, 358/434, 358/435, 358/436, 358/402, 379/100.08, 379/100.15, 379/100.17, 379/100.06, 709/207

PRIOR-ART-DISCLOSED:

## U.S. PATENT DOCUMENTS

Search Selected

Search ALL

Clear

PAT-NO	ISSUE-DATE	PATENTEE-NAME	US-CL
<input type="checkbox"/> <u>5689642</u>	November 1997	Harkins et al.	709/207
<input type="checkbox"/> <u>5739919</u>	April 1998	Lee et al.	385/442
<input type="checkbox"/> <u>5881233</u>	March 1999	Toyoda et al.	358/402
<u>6266160</u>	July 2001	Saito et al.	358/1.15

☐☐6335966

January 2002

Toyoda

358/442

## FOREIGN PATENT DOCUMENTS

FOREIGN-PAT-NO	PUBN-DATE	COUNTRY	US-CL
812100	December 1997	EP	
818916	January 1998	EP	

## OTHER PUBLICATIONS

Newman, P. et al., "An Extensible Message Format For Message Disposition Notifications", RFC Specification RFC2298.TXT, Online, Mar. 1, 1998.  
Toyoda, H. et al., "A Simple Mode Of facsimile Using Internet Mail", RFC Specification RFC2305.TXT, Online, Mar. 1, 1998.

ART-UNIT: 2622

PRIMARY-EXAMINER: Williams; Kimberly A.

ATTY-AGENT-FIRM: Fitzpatrick, Cella, Harper &amp; Scinto

## ABSTRACT:

Disclosed are an Internet FAX apparatus having an Internet FAX function capable of transmission with an optimum Internet FAX receiving capability requiring no communication charge, a network system including the apparatus, and a method of controlling the apparatus. The Internet FAX apparatus of this invention inquires a receiving apparatus of its receiving capability by the SMTP protocol before transmitting an image file, and receives information of the receiving capability from the receiving apparatus by the SMTP protocol. The Internet FAX apparatus converts a read image into an image file corresponding to the receiving capability of the receiving apparatus and transmits the image file by the SMTP protocol. The Internet FAX apparatus requests the receiving apparatus to transmit a reception confirmation message when transmitting the image file, and receives the reception confirmation message.

21 Claims, 9 Drawing figures

First Hit    Fwd Refs

Generate Collection

Print

L3: Entry 6 of 13

File: USPT

Jun 25, 2002

DOCUMENT-IDENTIFIER: US 6411393 B1.

TITLE: Apparatus and method of automatically delivering E-mail stored in mail server to arbitrary facsimile apparatus

Abstract Text (1):

A data terminal which is coupled to a local area network and a public switched telephone network includes first and second communications devices that transmit and receive electronic mails through the local area network and facsimile image information through the public switched telephone network, respectively. The data terminal further includes a memory and a delivery controller. The memory stores a plurality of electronic-mail delivery control information sets, each information set being uniquely assigned to each user and including user identifiers necessary for the user to access a mail server and to receive electronic mails for the user, at least one facsimile number where to deliver the electronic mails, and a flag for indicating whether an electronic-mail delivery operation is required. The delivery controller controls the delivery operation, during which the data terminal accesses the mail server using the user identifiers to receive electronic mails for the user when the flag indicates the electronic-mail delivery operation is required and then the data terminal converts the electronic mails into facsimile image information. The controller then transmits the facsimile image information to at least one communications terminal that has a facsimile communications function using the at least one facsimile number included in the user identifiers.

First Hit   Fwd Refs☐ **Generate Collection** **Print**

L3: Entry 6 of 13

File: USPT

Jun 25, 2002

US-PAT-NO: 6411393

DOCUMENT-IDENTIFIER: US 6411393 B1

TITLE: Apparatus and method of automatically delivering E-mail stored in mail server to arbitrary facsimile apparatus

DATE-ISSUED: June 25, 2002

## INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
Wakasugi; Naoki	Sagamihara			JP

## ASSIGNEE-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY	TYPE	CODE
Ricoh Technology Research, Inc.	Kanagawa-ken			JP		03

APPL-NO: 09/ 132298   [PALM]

DATE FILED: August 11, 1998

## FOREIGN-APPL-PRIORITY-DATA:

COUNTRY	APPL-NO	APPL-DATE
JP	9-230515	August 13, 1997

INT-CL: [07] G06 F 13/00, H04 N 1/00

US-CL-ISSUED: 358/1.15; 358/402, 358/403, 358/407, 709/206

US-CL-CURRENT: 358/1.15; 358/402, 358/403, 358/407, 709/206

FIELD-OF-SEARCH: 358/1.15, 358/402, 358/403, 358/407, 358/434, 358/442, 358/443, 358/468, 709/206, 709/238, 709/239, 709/240, 709/244, 379/90.01, 379/93.07, 379/93.24, 379/100.01, 379/100.08, 379/100.09, 379/100.12

PRIOR-ART-DISCLOSED:

## U.S. PATENT DOCUMENTS

**Search Selected** **Search ALL** **Clear**

PAT-NO	ISSUE-DATE	PATENTEE-NAME	US-CL
<input type="checkbox"/> <u>5513126</u>	April 1996	Harkins et al.	709/228
<input type="checkbox"/> <u>5608786</u>	March 1997	Gordon	370/352
<input type="checkbox"/> <u>5812278</u>	September 1998	Toyoda et al.	358/402
<u>5826034</u>	October 1998	Albal	709/239



<input type="checkbox"/>				
<input type="checkbox"/>	<u>5859967</u>	January 1999	Kaufeld et al.	713/200
<input type="checkbox"/>	<u>5905777</u>	May 1999	Foladare et al.	379/90.01
<input type="checkbox"/>	<u>6023700</u>	February 2000	Owens et al.	707/10
<input type="checkbox"/>	<u>6072862</u>	June 2000	Srinivasan	379/100.08
<input type="checkbox"/>	<u>6182118</u>	January 2001	Finney et al.	709/206

## FOREIGN PATENT DOCUMENTS

FOREIGN-PAT-NO	PUBN-DATE	COUNTRY	US-CL
WO 97/10668	March 1997	WO	

ART-UNIT: 2722

PRIMARY-EXAMINER: Coles; Edward

ASSISTANT-EXAMINER: Pokrzywa; Joseph R.

ATTY-AGENT-FIRM: Cooper &amp; Dunham LLP

## ABSTRACT:

A data terminal which is coupled to a local area network and a public switched telephone network includes first and second communications devices that transmit and receive electronic mails through the local area network and facsimile image information through the public switched telephone network, respectively. The data terminal further includes a memory and a delivery controller. The memory stores a plurality of electronic-mail delivery control information sets, each information set being uniquely assigned to each user and including user identifiers necessary for the user to access a mail server and to receive electronic mails for the user, at least one facsimile number where to deliver the electronic mails, and a flag for indicating whether an electronic-mail delivery operation is required. The delivery controller controls the delivery operation, during which the data terminal accesses the mail server using the user identifiers to receive electronic mails for the user when the flag indicates the electronic-mail delivery operation is required and then the data terminal converts the electronic mails into facsimile image information. The controller then transmits the facsimile image information to at least one communications terminal that has a facsimile communications function using the at least one facsimile number included in the user identifiers.

72 Claims, 23 Drawing figures

First Hit   Fwd Refs

Generate Collection

Print

L3: Entry 7 of 13

File: USPT

Mar 19, 2002

DOCUMENT-IDENTIFIER: US 6359892 B1

TITLE: Remote access, emulation, and control of office equipment, devices and services

Abstract Text (1):

A business has a main office (13) which has a controller (225), a plurality of telephones, a plurality of computers, a PBX and/or an ACD (216), and a plurality of corporate resources (220) such as servers, hosts, applications, databases, routers, gateways, switches, a voicemail system, an e-mail system, and facsimile servers. A user at the main office (13) has access to the various corporate resources and also has a portable communications device (10), such as a laptop computer, with which to place a call to the controller via a communications link (11) such as the Internet, to send user commands to and receive the resultant status, information, or operation, from, the controller, to access any of the corporate resources and data, and to make calls to and receive communications from outside parties (12). In addition, the user may create a personal profile which causes the controller to forward selected communications to him, via the Internet, wherever the user may be. The laptop computer allows the user to operate in the same manner as if the user was actually in his office, including placing, receiving, forwarding, and conferencing telephone calls. As a result, regardless of where the user is located, and regardless of what equipment is actually available at the current location of the user, the user can conduct business using the same devices and features that are available at the user's office.

First Hit   Fwd Refs☐ **Generate Collection** **Print**

L3: Entry 7 of 13

File: USPT

Mar 19, 2002

US-PAT-NO: 6359892

DOCUMENT-IDENTIFIER: US 6359892 B1

TITLE: Remote access, emulation, and control of office equipment, devices and services

DATE-ISSUED: March 19, 2002

## INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
Szlam; Aleksander	Norcross	GA		

## ASSIGNEE-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY	TYPE CODE
Inventions, Inc.	Norcross	GA			02

APPL-NO: 08/ 977412   [PALM]

DATE FILED: November 24, 1997

## PARENT-CASE:

This appln claims benefit of Provisional No. 60/064,251 filed Nov. 4, 1997.

INT-CL: [07] H04 M 3/42, H04 M 7/00

US-CL-ISSUED: 370/401; 370/465, 709/217, 709/227

US-CL-CURRENT: 370/401; 370/465, 709/217, 709/227

FIELD-OF-SEARCH: 370/352, 370/353, 370/354, 370/355, 370/356, 370/400, 370/401, 370/465, 370/466, 709/200, 709/203, 709/217, 709/218, 709/219, 709/227, 709/249, 709/250, 379/265, 379/93.03, 379/211, 379/93.02, 379/212, 379/214, 379/419, 379/93.07, 379/100.12, 379/207

## PRIOR-ART-DISCLOSED:

## U.S. PATENT DOCUMENTS

**Search Selected**   **Search ALL**   **Clear**

PAT-NO	ISSUE-DATE	PATENTEE-NAME	US-CL
<input type="checkbox"/> <u>5598536</u>	January 1997	Slaughter, III et al.	385/200.16
<input type="checkbox"/> <u>5764639</u>	June 1998	Staples et al.	370/401
<input type="checkbox"/> <u>5790548</u>	August 1998	Sistanizadeh et al.	370/401
<input type="checkbox"/> <u>5793365</u>	August 1998	Tang et al.	345/329

<input type="checkbox"/> 5812819	September 1998	Rodwin et al.	395/500
<input type="checkbox"/> 5889845	March 1999	Staples et al.	379/211
<input type="checkbox"/> 6122255	September 2000	Bartholomew et al.	370/237

## FOREIGN PATENT DOCUMENTS

FOREIGN-PAT-NO	PUBN-DATE	COUNTRY	US-CL
0 880 255	November 1998	EP	
WO 96/31044	October 1996	WO	
WO 97/18662	May 1997	WO	
WO 97/38518	October 1997	WO	

ART-UNIT: 2644

PRIMARY-EXAMINER: Ngo; Ricky

ATTY-AGENT-FIRM: Troutman Sanders LLP Warner; Charles L.

## ABSTRACT:

A business has a main office (13) which has a controller (225), a plurality of telephones, a plurality of computers, a PBX and/or an ACD (216), and a plurality of corporate resources (220) such as servers, hosts, applications, databases, routers, gateways, switches, a voicemail system, an e-mail system, and facsimile servers. A user at the main office (13) has access to the various corporate resources and also has a portable communications device (10), such as a laptop computer, with which to place a call to the controller via a communications link (11) such as the Internet, to send user commands to and receive the resultant status, information, or operation, from, the controller, to access any of the corporate resources and data, and to make calls to and receive communications from outside parties (12). In addition, the user may create a personal profile which causes the controller to forward selected communications to him, via the Internet, wherever the user may be. The laptop computer allows the user to operate in the same manner as if the user was actually in his office, including placing, receiving, forwarding, and conferencing telephone calls. As a result, regardless of where the user is located, and regardless of what equipment is actually available at the current location of the user, the user can conduct business using the same devices and features that are available at the user's office.

7 Claims, 10 Drawing figures

First Hit   Fwd Refs**End of Result Set**☐ **Generate Collection** **Print**

L3: Entry 13 of 13

File: USPT

Mar 15, 1994

DOCUMENT-IDENTIFIER: US 5295181 A

TITLE: Automatic facsimile output recipient telephoning system

Brief Summary Text (23):

The recently announced Xerox Corporation developed "PaperWorks".TM. product utilizes a special encoded fine pattern of special marks ("glyphs"), electronically recognized as such using PC computer software by the facsimile electronic image receiver. ["PaperWorks".TM. and information thereon is commercially available by calling 1-800-432-9329.] It was initially configured to operate on a conventional personal computer having a conventional internal fax card and a modem, electronic mail system or other network connection to telecommunications, and running "Windows".TM. software. A "PaperWorks".TM. fax form carries a coded identification region which, upon scanning, may be decoded by an appropriate processing system. This coded identification allows the system to determine which of several different pre-stored forms the received form is, and what its page layout is. From this, the system can also extract the necessary user-entered information from the form to facilitate processing. An important feature of the "PaperWorks".TM. system is the use of data defining a control sheet image to provide information in accordance with which operations are performed on data defining a sequence of images [data defining images, not actual physical sheets of a medium]. For example, the control sheet image can include information indicating a designation to which the fax server then transmits data defining said sequence of images.

First Hit   Fwd Refs

End of Result Set

☐ **Generate Collection** **Print**

L3: Entry 13 of 13

File: USPT

Mar 15, 1994

US-PAT-NO: 5295181

DOCUMENT-IDENTIFIER: US 5295181 A

TITLE: Automatic facsimile output recipient telephoning system

DATE-ISSUED: March 15, 1994

## INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
Kuo; Youti	Penfield	NY		

## ASSIGNEE-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY	TYPE CODE
Xerox Corporation	Stamford	CT			02

APPL-NO: 07/ 933831   [PALM]

DATE FILED: August 24, 1992

INT-CL: [05] H04M 11/00

US-CL-ISSUED: 379/100

US-CL-CURRENT: 379/100.07; 379/100.08, 379/100.14

FIELD-OF-SEARCH: 379/93, 379/96-100, 379/90, 379/110, 379/354-356, 358/400, 358/403, 358/438, 358/440, 358/442, 358/468, 358/444

PRIOR-ART-DISCLOSED:

## U.S. PATENT DOCUMENTS

**Search Selected** **Search ALL** **Clear**

PAT-NO	ISSUE-DATE	PATENTEE-NAME	US-CL
<input type="checkbox"/> <u>T102102</u>	August 1982	Bolle et al.	355/14R
<input type="checkbox"/> <u>4086443</u>	April 1978	Gorham et al.	379/100
<input type="checkbox"/> <u>4352012</u>	September 1982	Verderber et al.	235/487
<input type="checkbox"/> <u>4414579</u>	November 1983	Dattilo et al.	358/256
<input type="checkbox"/> <u>4430563</u>	February 1984	Harrington	235/494
<input type="checkbox"/> <u>4437660</u>	March 1984	Tompkins et al.	271/290
<input type="checkbox"/> <u>4470356</u>	September 1984	Davis et al.	109/24.1

<input type="checkbox"/>	<u>4654718</u>	March 1987	Sueyoshi	358/257
<input type="checkbox"/>	<u>4763892</u>	August 1988	Tanaka et al.	271/293
<input type="checkbox"/>	<u>4843434</u>	June 1989	Lawrence et al.	355/72
<input type="checkbox"/>	<u>4893333</u>	January 1990	Baran et al.	379/100
<input type="checkbox"/>	<u>4947345</u>	August 1990	Paradise et al.	364/519
<input type="checkbox"/>	<u>5051779</u>	September 1991	Hikawa	355/200
<input type="checkbox"/>	<u>5060980</u>	October 1991	Johnson et al.	283/70
<input type="checkbox"/>	<u>5098074</u>	March 1992	Mandel et al.	270/53
<input type="checkbox"/>	<u>5115326</u>	May 1992	Burgess et al.	358/440
<input type="checkbox"/>	<u>5126858</u>	June 1992	Kurogane et al.	358/400
<input type="checkbox"/>	<u>5127047</u>	June 1992	Bell et al.	379/100
<input type="checkbox"/>	<u>5161037</u>	November 1992	Saito	358/468

## FOREIGN PATENT DOCUMENTS

FOREIGN-PAT-NO	PUBN-DATE	COUNTRY	US-CL
0241273	October 1987	EP	
0354703	February 1990	EP	

ART-UNIT: 268

PRIMARY-EXAMINER: Chan; Wing F.

## ABSTRACT:

Separating the physical sheets outputted from a shared users printer, especially, a facsimile receiver, into separate job sets for separate designed recipients, and notifying the recipients, with an independent "mailboxing" job sorting accessory unit, not requiring any electronic connection to the printer, controlled solely by physical job cover sheets outputted by the printer at the same output in advance of the other sheets of the job, which cover sheets variably encoded with simply and uncritically marked areas indicative of an assigned bin number and the job sheet count. The unit sequentially takes the printer output sheets and feeds them through a sheet input with optical sensing connecting with a control for detecting the marked area encoding of the cover sheet and determining if it corresponds to an assigned bin number, for feeding the subsequent output sheets of the designated sheet count to a designated bin subsequent to such a detection; and for feeding output sheets to another output sheet collection bin if no such encoding is detected. The disclosed unit also desirably has bin locking for restricting access to individual bins with electrical unlocking of a bin in response to entry of a bin access code. The remote recipient notification is an integral automatic bin recipient messaging (telephoning) of the pre-designated bin-holder with a recorded message telling that bin-holder is receiving or has received a job in his or her designated bin, by automatically dialing telephone numbers preprogrammed and maintained in non-volatile memory for designated bins, so that only the bin number and not the telephone number need be indicated on the controlling cover sheet.

12 Claims, 9 Drawing figures



US006687742B1

(12) **United States Patent**  
**Iwazaki**

(10) Patent No.: **US 6,687,742 B1**  
(45) Date of Patent: **Feb. 3, 2004**

(54) **COMMUNICATION CONTROL METHOD  
FOR ELECTRONIC MAIL SYSTEM**

6,457,044 B1 • 9/2002 IwaZaki ..... 709/206

**FOREIGN PATENT DOCUMENTS**

(75) Inventor: **Ryuji Iwazaki, Shizuoka-ken (JP)**

JP 11-65963 3/1999

(73) Assignee: **Toshiba Tec Kabushiki Kaisha, Tokyo (JP)**

\* cited by examiner

(\*) Notice: Subject to any disclaimer, the term of this patent is extended or adjusted under 35 U.S.C. 154(b) by 640 days.

Primary Examiner—Mehmet B. Geckil

(74) Attorney, Agent, or Firm—Frishauf, Holtz, Goodman & Chick, P. C.

(57) **ABSTRACT**

A sender transforms scanned image data to binary compressed data with a fixed parameter, converts it to e-mail data, adds information indicating its local control system and identification information for a capability request to the e-mail data and sends the resultant e-mail data. When a transmission destination is an electronic mail device, the transmission destination prints the attached page of specific conditions after which communications between the sender and the receiver are terminated. When the transmission destination has the same control device as the sender, the transmission destination transmits a response message to the sender in which information indicating its local control method and a capability response are provided. The sender generates, from image data, binary compressed data whose image size, resolution and coding system are matched with the capability of the transmission destination, converts this binary compressed data to e-mail data and resends the e-mail data.

(21) Appl. No.: **09/584,442**

(22) Filed: **May 31, 2000**

(30) **Foreign Application Priority Data**

Jun. 3, 1999 (JP) ..... 11-156481  
Jul. 28, 1999 (JP) ..... 11-213897

(51) Int. Cl.<sup>7</sup> ..... **G06F 15/16**

(52) U.S. Cl. .... **709/206; 358/402**

(58) Field of Search ..... **709/206, 207; 379/100.01, 100.02, 100.08, 100.12, 100.13, 100.17; 358/402, 403, 434, 442, 468**

(56) **References Cited**

**U.S. PATENT DOCUMENTS**

5,666,489 A • 9/1997 Fite et al. .... 709/220  
6,266,160 B1 • 7/2001 Saito et al. .... 358/407  
6,335,966 B1 • 1/2002 Toyoda ..... 379/100.06

**18 Claims, 10 Drawing Sheets**

Date: Mon, 8 Mar 1999 16:50:00 +0900  
From: foo@domain2.co.jp  
Message-Id: <199903080750@domain2.co.jp>  
X-Mailer: InternetFAX 3rd mode  
X-fax: capability response  
Subject: Disposition notification  
To: ifext@domain1.co.jp  
MIME-Version: 1.0  
Content-Type: multipart/report;  
report-type=disposition-notification;  
boundary="xyzzyz"  
--xyzzyz

HEADER





US006574598B1

(12) **United States Patent**  
**Nakatsuyama et al.**

(10) **Patent No.:** **US 6,574,598 B1**  
(45) **Date of Patent:** **Jun. 3, 2003**

(54) **TRANSMITTER AND RECEIVER,  
APPARATUS AND METHOD, ALL FOR  
DELIVERY OF INFORMATION**

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(\*) **Notice:** Subject to any disclaimer, the term of this  
patent is extended or adjusted under 35  
U.S.C. 154(b) by 0 days.

(21) **Appl. No.:** **09/381,255**

(22) **PCT Filed:** **Jan. 13, 1999**

(86) **PCT No.:** **PCT/JP99/00092**

§ 371 (c)(1),

(2), (4) **Date:** **Nov. 18, 1999**

(87) **PCT Pub. No.:** **WO99/36905**

**PCT Pub. Date:** **Jul. 22, 1999**

(30) **Foreign Application Priority Data**

**Jan. 19, 1998 (JP) ..... 10-007777**

(51) **Int. Cl.<sup>7</sup> ..... G10L 13/08; G10L 19/14;**  
**G10L 21/06**

(52) **U.S. Cl. .... 704/260; 704/500; 704/201;**  
**704/258**

(58) **Field of Search ..... 704/258, 260,**  
**704/273, 500, 201**

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**Assistant Examiner—Daniel V. Nolan**

(74) **Attorney, Agent, or Firm—Jay H. Maioli**

(57) **ABSTRACT**

A transmitter and receiver adapted to deliver transformed information obtained by transforming the text information of an electronic mail into intermediate language information as voicing information. The transmitting apparatus generates intermediate language information on the basis of the text data received by the transmitting apparatus and also transformed information on the basis of the intermediate language information and transmits the information to the receiving apparatus. Upon receiving the transformed information, the receiving apparatus retrieves the intermediate language information from the received transformed data, and carries out an operation of voice synthesis on the basis of the retrieved intermediate language information and outputs the synthesized voice.

**37 Claims, 13 Drawing Sheets**

USER

-2

OTHER USER

-3



US006437873B1

(12) **United States Patent**  
**Maeda**

(10) Patent No.: **US 6,437,873 B1**  
(45) Date of Patent: **Aug. 20, 2002**

(54) **INTERNET FACSIMILE APPARATUS,  
NETWORK SYSTEM HAVING THE SAME,  
AND METHOD OF CONTROLLING THE  
SAME**

(75) Inventor: **Toru Maeda, Mitaka (JP)**

(73) Assignee: **Canon Kabushiki Kaisha, Tokyo (JP)**

(\*) Notice: Subject to any disclaimer, the term of this patent is extended or adjusted under 35 U.S.C. 154(b) by 0 days.

(21) Appl. No.: **09/263,860**

(22) Filed: **Mar. 8, 1999**

(30) **Foreign Application Priority Data**

Mar. 9, 1998 (JP) ..... 10-057253

(51) Int. Cl.<sup>7</sup> ..... **H04N 1/00; H04N 1/32;  
G06F 15/00**

(52) U.S. Cl. .... **358/1.15; 358/402; 358/442**

(58) Field of Search ..... **358/1.15, 442,  
358/405, 434, 435, 436, 402; 379/100.08,  
100.15, 100.17, 100.06; 709/207**

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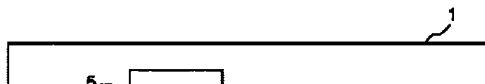
*Primary Examiner*—Kimberly A. Williams

(74) *Attorney, Agent, or Firm*—Fitzpatrick, Calla, Harper & Scinto

(57) **ABSTRACT**

Disclosed are an Internet FAX apparatus having an Internet FAX function capable of transmission with an optimum Internet FAX receiving capability requiring no communication charge, a network system including the apparatus, and a method of controlling the apparatus. The Internet FAX apparatus of this invention inquires a receiving apparatus of its receiving capability by the SMTP protocol before transmitting an image file, and receives information of the receiving capability from the receiving apparatus by the SMTP protocol. The Internet FAX apparatus converts a read image into an image file corresponding to the receiving capability of the receiving apparatus and transmits the image file by the SMTP protocol. The Internet FAX apparatus requests the receiving apparatus to transmit a reception confirmation message when transmitting the image file, and receives the reception confirmation message.

**21 Claims, 9 Drawing Sheets**





US005657461A

**United States Patent** [19]  
**Harkins et al.**

[11] Patent Number: **5,657,461**  
 [45] Date of Patent: **Aug. 12, 1997**

[54] **USER INTERFACE FOR DEFINING AND  
 AUTOMATICALLY TRANSMITTING DATA  
 ACCORDING TO PREFERRED  
 COMMUNICATION CHANNELS**

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[75] Inventors: **Larry E. Harkins**, Rochester; **Ken  
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*Primary Examiner*—Thomas G. Black  
*Assistant Examiner*—Ruay Lian Ho  
*Attorney, Agent, or Firm*—Ronald F. Chapuran

[73] Assignee: **Xerox Corporation**, Stamford, N.Y.

[21] Appl. No.: **130,929**

[22] Filed: **Oct. 4, 1993**

[51] Int. Cl.<sup>6</sup> ..... **G06F 3/14**

[52] U.S. Cl. .... **395/333; 395/326; 395/335**

[58] Field of Search ..... **395/500, 155,  
 395/156, 700, 326, 327, 328, 329, 330,  
 331; 345/149, 119, 156; 364/146, 514;  
 370/83.3, 85.15, 58.2, 60, 58.1**

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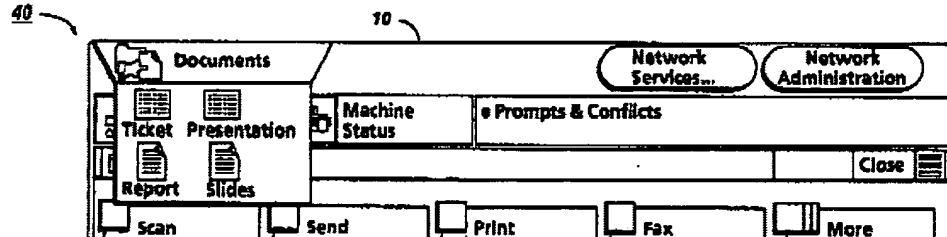
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[57] **ABSTRACT**

A user interface to automatically distribute information to a receiver on a network using devices (such as printers and facsimile machines) and communication channels (such as electronic mail) defined in a receiver profile. The receiver profile establishes the properties and mode for receipt of information for receivers on the network and the profile is published in a network repository for all network users or is accessible by selected groups or individuals on the network. Receivers have additional control over network senders by defining an information filter which further controls sender channel access (to a receiver) by defining some channels as having priority of access such as direct or delayed access, as well as selectively permitting senders to override the receiver profile. Consequently, receiver profiles provide a variable receiver definable link to senders using multiple forms of media as well as multiple hardware platforms and network configurations.

**18 Claims, 11 Drawing Sheets**



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Generate Collection

Print

L1: Entry 1 of 1

File: USPT

Dec 28, 1999

US-PAT-NO: 6008836

DOCUMENT-IDENTIFIER: US 6008836 A

**\*\* See image for Certificate of Correction \*\***

TITLE: Method and apparatus for adjusting television display control using a browser

DATE-ISSUED: December 28, 1999

## INVENTOR-INFORMATION:

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Wasserman; Steven C.	Wellesley	MA		

## ASSIGNEE-INFORMATION:

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WebTV Networks, Inc.	Mountain View	CA			02

APPL-NO: 08/ 755233   [PALM]

DATE FILED: November 22, 1996

## PARENT-CASE:

The present application is a continuation-in-part of the following U.S. Patent application: U.S. Patent application entitled, "Web Browser Allowing Navigation Between Hypertext Objects Using Remote Control," having application Ser. No. 08/660,088, and filed on Jun. 3, 1996; which is assigned to the assignee of the present invention.

INT-CL: [06] H04 N 7/10

US-CL-ISSUED: 348/6; 348/10, 348/13, 345/327, 345/338

US-CL-CURRENT: 725/131; 345/719, 345/722, 725/114, 725/37

FIELD-OF-SEARCH: 348/189, 348/190, 348/191, 348/177, 348/10, 348/11, 348/678, 348/687, 455/62, 455/63, 395/200.33, 395/200.47, 395/200.51, 395/200.52, 434/37R, 434/118, 434/323, 345/338

PRIOR-ART-DISCLOSED:

U.S. PATENT DOCUMENTS

Search Selected

Search ALL

Clear

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ART-UNIT: 271

PRIMARY-EXAMINER: Faile; Andrew I.

ASSISTANT-EXAMINER: Brown; Reuben M.

ATTY-AGENT-FIRM: Workman, Nydegger & Seeley

ABSTRACT:

Web browser software implemented in a set-top box as part of a client system communicating over the Internet with one or more servers allows a user to adjust the picture quality of a monitor through World-Wide Web pages displayed on the monitor. The web browser software provides picture adjustment screens which contain instructions on how to adjust the monitor controls to optimize the picture quality. The picture adjustment screens also contain test patterns which provide reference and visual feedback of the monitor adjustment. The user adjusts the picture quality of the monitor using the monitor display controls and the test patterns provided on the picture adjustment screens. Picture adjustment screens are provided for display characteristics such as picture brightness, contrast, sharpness, color, and hue.

22 Claims, 10 Drawing figures

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Generate Collection

Print

L8: Entry 3 of 20

File: USPT

Feb 3, 2004

DOCUMENT-IDENTIFIER: US 6687742 B1

TITLE: Communication control method for electronic mail system

Detailed Description Text (22):

The receiver can identify identification information sent from the sender when the receiver is an Internet facsimile which carries out the same control method as that of the sender, or an Internet facsimile which comprises means for acquiring capability information of a transmission destination which is added to an e-mail, means for transmitting an image in the form of an e-mail under either of the condition of transmitting an image with fixed image conditions or the condition of transmitting an image according to the capability of the transmission destination, means for adding capability information to an e-mail, means for processing an image attached to an e-mail, means for adding identification information to an e-mail according to the standard e-mail format and means for identifying the identification information added to an e-mail.

Detailed Description Text (31):

When an image is transmitted in the form of an e-mail to a transmission destination whose capability is unknown, as apparent from the above, it is possible to transmit an image of specific conditions to the transmission destination even if the transmission destination is an Internet facsimile or personal computer which has ordinary e-mail software installed therein, thereby guaranteeing interoperability. Further, the sender can detect the capability of the receiver and can transmit an image according to that capability when the receiver Internet facsimile has the same functions as the sender, which carries out the same control method as that of the sender, or an Internet facsimile which comprises means for acquiring capability information of a transmission destination which is added to an e-mail, means for transmitting an image in the form of an e-mail under either of the condition of transmitting an image with fixed image conditions or the condition of transmitting an image according to the capability of the transmission destination, means for adding capability information to an e-mail, means for processing an image attached to an e-mail, means for adding identification information to an e-mail according to the standard e-mail format and means for identifying the identification information added to an e-mail.

Detailed Description Text (35):

Information indicating the local control system, "X-Mailer: Internet FAX 3rd mode", alone may be described in the "X-Mailer:" field as identification information. In this case, an agreement may be made in such a way that if the receiver is an Internet facsimile which comprises means for acquiring capability information of a transmission destination which is added to an e-mail, means for transmitting an image in the form of an e-mail under either of the condition of transmitting an image with fixed image conditions or the condition of transmitting an image according to the capability of the transmission destination, means for adding capability information to an e-mail, means for processing an image attached to an e-mail, means for adding identification information to an e-mail according to the standard e-mail format and means for identifying the identification information added to an e-mail, when the receiver identifies identification information from the sender, the receiver checks the user defined field in the header of the received e-mail message and understands that the sender has the same means as the

receiver if the field is "X-Mailer: Internet FAX 3rd mode" and that the message is a capability request message.

Detailed Description Text (56):

The communication destination can identify identification information sent from the sender when the communication destination is an Internet facsimile which carries out the same communication control method as that of the sender, i.e., when the communication destination is an Internet facsimile that comprises, as the functions of the receiver which receives an e-mail, means for identifying the identification information added to an image file of specific conditions, means for adding identification information to an e-mail according to the standard e-mail format and means for processing an image attached to an e-mail.

Detailed Description Text (65):

Furthermore, when the communication destination or receiver is an Internet facsimile which carries out the same communication control method as that of the sender, i.e., an Internet facsimile that comprises, as the functions of the receiver which receives an e-mail, means for identifying the identification information added to an image file of specific conditions, means for adding identification information to an e-mail according to the standard e-mail format and means for processing an image attached to an e-mail, the sender can detect the capability of the receiver and can transmit an image matched with that capability.

CLAIMS:

1. A communication control method for an electronic mail system comprising a plurality of electronic mail devices, wherein an electronic mail device to serve as a sender adds identification information according to a standard e-mail format to an e-mail, attaches an image of specific conditions by a standard of an Internet facsimile to the e-mail and transmits the e-mail; when identifying the identification information in the received e-mail, an electronic mail device to serve as a receiver adds identification information and local capability information to an e-mail to be returned to the sender and returns the e-mail; when identifying the identification information in the received e-mail, the electronic mail device to serve as a sender acquires the capability information from the received e-mail, attaches an image matched with the acquired capability information to an e-mail to be returned to the receiver and returns the e-mail; and the electronic mail device to serve as a receiver processes the image attached to the received e-mail.

12. A communication control method for an electronic mail device for transmitting an image in an e-mail, wherein when the image is to be transmitted to a receiver whose capability is unknown in an e-mail format via an Internet, an electronic mail device to serve as a sender forms an image file of specific conditions defined by a standard specification of an internet facsimile device, writes a sequence of characters indicating a capability request in a comment field in a format of the image file, attaches the image file to an e-mail to be transmitted and transmits the e-mail to the receiver.



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L8: Entry 15 of 20

File: USPT

Nov 2, 1999

DOCUMENT-IDENTIFIER: US 5978836 A  
TITLE: Workflow systems and methods

Detailed Description Text (48):

In the first row, the document is sent to P2. The next three rows provide P2 with the choice of approving the document and sending it to P3, or sending the document back to P1, or canceling the workflow and sending a message to P1. The fifth row is the completion of the workflow by P3. The sixth and seventh rows provide P1 with the choice of sending the document to P2 or canceling the workflow and sending a message to P2. The e-mail format uses STEP, DOC, and BRANCH INDICATOR control fields. The DOC field enables tracking of each document using the LOCATION table and MOVE HISTORY table. These tables provide real time location of the document and statistical information on each document and collection of documents. The BRANCH INDICATOR field permits P1 and P2 to implement their choices.

Detailed Description Text (76):

In certain workflows, it is desirable to control what data each user in the procedure can see, enter, or modify based on the step in the route. The form to be used may be specified in the route. The form route manager holds a set of document templates in a forms library that are used as e-mail formats. This may require that the form route manager extract data from an e-mail it receives and insert it into an e-mail form that it is sending. The route has a form field associated with a route step that designates the form to be used for that step. For FIG. 23, the SQL TABLE FORMS illustrates the route structure to implement the forms function.

Detailed Description Text (79):

Users in workflow may want information on the progress or the statistics of the workflow, such as the average process time. However, many of the users are not connected to the form route manager and only have access using e-mail. The critical parameter for such information is the value of DOC, the index for the LOCATION and MOVE HISTORY tables. Each document has a unique DOC value. In certain embodiments, the users must save the value of DOC if they want to get status on the document. To facilitate e-mail access, a set of e-mail formats are illustrated in FIG. 24. In response to an e-mail 241, having a control field STATUS, and sent by a user at e-mail address A, an e-mail 242 is sent by the form route manager to e-mail address A with the STATUS and the DOC=I at the same time as the e-mail 243 is sent to the e-mail address B. A user at e-mail address A saves e-mail 242 for later use to request status on this document. The e-mail sequence 244 and 245 advances the document to e-mail address C. A user at e-mail address A requests the status of the document by sending e-mail 246 to form route manager by using the REPLY function on the e-mail 242 that was saved earlier. The form route manager responds with e-mail 247 with the LOCATION and MOVE HISTORY for the document with DOC=I. A user at e-mail address A can save e-mail 247 and use it or e-mail 242 to request subsequent status.

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L8: Entry 15 of 20

File: USPT

Nov 2, 1999

US-PAT-NO: 5978836

DOCUMENT-IDENTIFIER: US 5978836 A

TITLE: Workflow systems and methods

DATE-ISSUED: November 2, 1999

## INVENTOR-INFORMATION:

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## ASSIGNEE-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY	TYPE CODE
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APPL-NO: 08/ 901539   [PALM]

DATE FILED: July 28, 1997

INT-CL: [06] G06 F 13/00

US-CL-ISSUED: 709/206; 709/203, 709/219

US-CL-CURRENT: 709/206; 709/203, 709/219FIELD-OF-SEARCH: 395/200.36, 395/200.33, 395/200.49, 395/200.47, 395/200.3,  
709/206, 709/203, 709/219, 709/217, 709/200

PRIOR-ART-DISCLOSED:

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Trammell, Work Flow Without Fear, Byte, Apr. 1996.

ART-UNIT: 278

PRIMARY-EXAMINER: Maung; Zarni

ATTY-AGENT-FIRM: Moll; Robert

## ABSTRACT:

The present invention relates to message-based workflow systems and methods for computer networks. In one embodiment, the present invention provides three elements: (1) an e-mail system; (2) PC's, terminals, or workstations connected by the e-mail system; and (3) a form route manager connected by the e-mail system.

19 Claims, 28 Drawing figures

[First Hit](#)   [Fwd Refs](#)

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L2: Entry 6 of 54

File: USPT

Sep 9, 2003

DOCUMENT-IDENTIFIER: US 6618748 B1

TITLE: Method, article of manufacture and apparatus for restricting the receipt of delegate reply messages

Abstract Text (1):

A method, article of manufacture, and apparatus for restricting the receipt of automatic delegate reply messages. Specifically, the method configures a control message for an electronic mail (e-mail) message addressed to at least one recipient terminal or computer, and sends the e-mail and control messages to the at least one recipient terminal. Upon processing the control message, the at least one recipient terminal determines whether to reply to the received e-mail message with a delegate reply message. As such, a sender of the e-mail message may restrict the receipt of delegate reply messages by configuring the control message through different features or options.

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L2: Entry 6 of 54

File: USPT

Sep 9, 2003

US-PAT-NO: 6618748

DOCUMENT-IDENTIFIER: US 6618748 B1

TITLE: Method, article of manufacture and apparatus for restricting the receipt of delegate reply messages

DATE-ISSUED: September 9, 2003

## INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
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Ruby; Kurtis W.	Kasson	MN		
Santosuosso; John Matthew	Rochester	MN		

## ASSIGNEE-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY	TYPE	CODE
International Business Machines Corporation	Armonk	NY			02	

APPL-NO: 09/ 569790   [PALM]

DATE FILED: May 12, 2000

INT-CL: [07] G06 F 15/16

US-CL-ISSUED: 709/206

US-CL-CURRENT: 709/206

FIELD-OF-SEARCH: 709/206, 709/219, 709/202, 709/203, 709/207

PRIOR-ART-DISCLOSED:

## U.S. PATENT DOCUMENTS

**Search Selected** **Search ALL** **Clear**

	PAT-NO	ISSUE-DATE	PATENTEE-NAME	US-CL
<input type="checkbox"/>	<u>5627764</u>	May 1997	Schutzman et al.	709/207
<input type="checkbox"/>	<u>6016478</u>	January 2000	Zhang et al.	705/9
<input type="checkbox"/>	<u>6216165</u>	April 2001	Woltz et al.	709/232
<input type="checkbox"/>	<u>6356937</u>	March 2002	Montville et al.	709/206

ART-UNIT: 2155

PRIMARY-EXAMINER: Eng; David Y.

ATTY-AGENT-FIRM: Moser, Patterson & Sheridan, L.L.P.

ABSTRACT:

A method, article of manufacture, and apparatus for restricting the receipt of automatic delegate reply messages. Specifically, the method configures a control message for an electronic mail (e-mail) message addressed to at least one recipient terminal or computer, and sends the e-mail and control messages to the at least one recipient terminal. Upon processing the control message, the at least one recipient terminal determines whether to reply to the received e-mail message with a delegate reply message. As such, a sender of the e-mail message may restrict the receipt of delegate reply messages by configuring the control message through different features or options.

35 Claims, 5 Drawing figures .

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L2: Entry 16 of 54

File: USPT

Aug 27, 2002

DOCUMENT-IDENTIFIER: US 6442589 B1

TITLE: Method and system for sorting and forwarding electronic messages and other data

Abstract Text (1):

An electronic message forwarding system selectively forwards information to a plurality of different receiving device types. One or more user defined filters filter incoming messages, route the messages, and send the routed message to appropriate form converters to convert the message into a form appropriate to the receiving device type, such as e-mail, pager, facsimile, or telephone forwarding. In a preferred embodiment, a plurality of filters, router, and form converters may be used to perform a message classification, channel selection, and channel output control function.

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L2: Entry 19 of 54

File: USPT

May 14, 2002

DOCUMENT-IDENTIFIER: US 6389121 B1

TITLE: Method and apparatus of performing a memory saving operation in an electronic communications system

Abstract Text (1):

A data terminal apparatus coupled to a local area network and a telephone line network includes a first and second communications mechanisms, a memory, a printer, and first and second controllers. The first communications mechanism exchanges electronic mail with other data terminals and a mail server. The second communications mechanism exchanges image information with facsimile terminals. The memory stores the image information which is received from one of the facsimile terminals. The printer reproduces the image information. The first controller generates electronic mail which includes the image information when the printer is in an inoperative condition, and sends the electronic mail to the mail server. Then, the first controller erases the image information from the memory. The second controller retrieves the electronic mail from the mail server when the printer recovers from the inoperative condition and instructs the printer to reproduce the image information included in the electronic mail.



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L2: Entry 19 of 54

File: USPT

May 14, 2002

US-PAT-NO: 6389121

DOCUMENT-IDENTIFIER: US 6389121 B1

TITLE: Method and apparatus of performing a memory saving operation in an  
electronic communications system

DATE-ISSUED: May 14, 2002

## INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
Terao; Yuichi	Isehara			JP

## ASSIGNEE-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY	TYPE CODE
Ricoh Company, Ltd.	Tokyo			JP	03

APPL-NO: 09/ 248027   [PALM]

DATE FILED: February 10, 1999

## FOREIGN-APPL-PRIORITY-DATA:

COUNTRY	APPL-NO	APPL-DATE
JP	10-046327	February 13, 1998

INT-CL: [07] H04 M 11/00, H04 N 1/00, G06 K 1/00

US-CL-ISSUED: 379/100.08; 379/100.09, 379/93.24, 358/404, 358/1.15

US-CL-CURRENT: 379/100.08; 358/1.15, 358/404, 379/100.09, 379/93.24

FIELD-OF-SEARCH: 379/93.07, 379/93.233-93.24, 379/100.01, 379/100.05, 379/100.08,  
379/100.09, 379/100.12, 379/100.14, 358/400, 358/402-403, 358/407, 358/442-444,  
358/468, 358/1.13-1.15, 709/206-207, 709/246

PRIOR-ART-DISCLOSED:

U.S. PATENT DOCUMENTS

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PAT-NO	ISSUE-DATE	PATENTEE-NAME	US-CL
<input type="checkbox"/> <u>5027386</u>	June 1991	Hisano	379/100.05
<input type="checkbox"/> <u>5537218</u>	July 1996	Negi	358/444
<input type="checkbox"/> <u>5577108</u>	November 1996	Mankovitz	358/403
<u>5898824</u>	April 1999	Kato et al.	358/444

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<input type="checkbox"/>				
<input type="checkbox"/>	<u>6046824</u>	April 2000	Barak	379/100.09
<input type="checkbox"/>	<u>6137597</u>	October 2000	Kanaya	358/402
<input type="checkbox"/>	<u>6141695</u>	October 2000	Sekiguchi et al.	709/246
<input type="checkbox"/>	<u>6144459</u>	November 2000	Satou	358/1.15

ART-UNIT: 2643

PRIMARY-EXAMINER: Kuntz; Curtis

ASSISTANT-EXAMINER: Eng; George

ATTY-AGENT-FIRM: Cooper & Dunham LLP

ABSTRACT:

A data terminal apparatus coupled to a local area network and a telephone line network includes a first and second communications mechanisms, a memory, a printer, and first and second controllers. The first communications mechanism exchanges electronic mail with other data terminals and a mail server. The second communications mechanism exchanges image information with facsimile terminals. The memory stores the image information which is received from one of the facsimile terminals. The printer reproduces the image information. The first controller generates electronic mail which includes the image information when the printer is in an inoperative condition, and sends the electronic mail to the mail server. Then, the first controller erases the image information from the memory. The second controller retrieves the electronic mail from the mail server when the printer recovers from the inoperative condition and instructs the printer to reproduce the image information included in the electronic mail.

28 Claims, 14 Drawing figures

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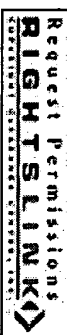
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## Intelligent agents on the Internet and Web

Murugesan, S.

Dept. of Comput. & Inf. Syst., Western Sydney Univ., Campbelltown, NSW, Australia;

*This paper appears in: TENCON '98. 1998 IEEE Region 10 International Conference on Global Connectivity in Energy, Computer, Communication and Control*

Meeting Date: 12/17/1998 - 12/19/1998

Publication Date: 17-19 Dec. 1998

Location: New Delhi India

On page(s): 97 - 102 vol.1

Volume: 1

Reference Cited: 33

Number of Pages: 2 vol. xvii+652

Inspec Accession Number: 6459358

### Abstract:

An intelligent agent (IA) is a self-contained, autonomous software module that could perform certain tasks on behalf of its users. It could also interact with other intelligent agents and/or human in performing its task(s). There is now growing interest in using intelligent software agents for a variety of tasks in a diverse range of applications: personal assistants, intelligent user interfaces, managing **electronic mail**, navigating and retrieving information from the Internet and databases, scheduling meetings and manufacturing **operations**, electronic business, online shopping, negotiating for

resources, decision making, design and telecommunications. The paper gives a brief introduction to intelligent agents and their classification, outlines applications of intelligent agents on the Internet and Web and highlights their prospects

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**Index Terms:**

Internet business data processing interactive systems software agents user interfaces  
Internet World Wide Web autonomous software module decision making electronic business  
electronic mail human interaction intelligent agents intelligent user interfaces manufacturing  
operations online shopping personal assistants scheduling software agents

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Lake, R. Pate, L.

Bell Commun. Res., Red Bank, NJ, USA ;

*This paper appears in: Global Telecommunications Conference, 1989, and Exhibition. 'Communications Technology for the 1990s and Beyond'. GLOBECOM '89, IEEE*

Meeting Date: 11/27/1989 - 11/30/1989

Publication Date: 27-30 Nov. 1989

**Location:** Dallas, TX USA

On page(s): 1232 - 1236 vol.2

**Reference Cited: 10**

**Inspection Accession Number: 3730320**

## Abstract:

In Bellcore's Integrated Media Architecture Laboratory (IMAL) architecture, **control**, and network design issues (including performance and its implications, traffic engineering, resource sizing, **operations**, and network architectures) of network-based multimedia services that are likely to exist in future broadband networks (e.g. broadband integrated services digital network) are studied. The authors present an overview of multimedia services that use audio, video, graphics, text, and other sorts of **data**; describe the

laboratory environment used to support these services; and provide a high-level description of how these services have been implemented as networked modules. It is noted that, not only must these applications be able to exist on the same network, but they should be able to coordinate their functions and share information in the most natural format. The development of generic server models for all of these services and efforts to make their use intuitive are discussed

---

**Index Terms:**

[ISDN](#) [broadband networks](#) [electronic mail](#) [multi-access systems](#) [telecommunication network management](#) [teleconferencing](#) [Bellcore](#) [Integrated Media Architecture Laboratory](#) [broadband integrated services digital network](#) [multimedia database](#) [multimedia mail system](#) [multimedia network architecture](#) [network control](#) [network design](#) [network-based multimedia services](#) [videoconferencing](#)

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#### **Index Terms:**

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[Internet](#) [World Wide Web](#) [autonomous software module](#) [decision making](#) [electronic business](#)  
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# A network environment for studying multimedia network architecture and control

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laboratory environment used to support these services; and provide a high-level description of how these services have been implemented as networked modules. It is noted that, not only must these applications be able to exist on the same network, but they should be able to coordinate their functions and share information in the most natural format. The development of generic server models for all of these services and efforts to make their use intuitive are discussed

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**Index Terms:**

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